



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,023	12/31/2003	Ho Lee	AB-1350 US	9344
7590	03/29/2005		EXAMINER	
David W. Heid MacPherson Kwok Chen & Heid LLP Suite 226 1762 Technology Drive San Jose, CA 95110			LUND, JEFFRIE ROBERT	
			ART UNIT	PAPER NUMBER
			1763	
DATE MAILED: 03/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/750,023	LEE, HO	
	Examiner	Art Unit	
	Jeffrie R. Lund	1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-9 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 2/05.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.
 7) Other: _____.
 8) Other: _____.
 9) Other: _____.
 10) Other: _____.
 11) Other: _____.
 12) Other: _____.
 13) Other: _____.
 14) Other: _____.
 15) Other: _____.
 16) Other: _____.
 17) Other: _____.
 18) Other: _____.
 19) Other: _____.
 20) Other: _____.
 21) Other: _____.
 22) Other: _____.
 23) Other: _____.
 24) Other: _____.
 25) Other: _____.
 26) Other: _____.
 27) Other: _____.
 28) Other: _____.
 29) Other: _____.
 30) Other: _____.
 31) Other: _____.
 32) Other: _____.
 33) Other: _____.
 34) Other: _____.
 35) Other: _____.
 36) Other: _____.
 37) Other: _____.
 38) Other: _____.
 39) Other: _____.
 40) Other: _____.
 41) Other: _____.
 42) Other: _____.
 43) Other: _____.
 44) Other: _____.
 45) Other: _____.
 46) Other: _____.
 47) Other: _____.
 48) Other: _____.
 49) Other: _____.
 50) Other: _____.
 51) Other: _____.
 52) Other: _____.
 53) Other: _____.
 54) Other: _____.
 55) Other: _____.
 56) Other: _____.
 57) Other: _____.
 58) Other: _____.
 59) Other: _____.
 60) Other: _____.
 61) Other: _____.
 62) Other: _____.
 63) Other: _____.
 64) Other: _____.
 65) Other: _____.
 66) Other: _____.
 67) Other: _____.
 68) Other: _____.
 69) Other: _____.
 70) Other: _____.
 71) Other: _____.
 72) Other: _____.
 73) Other: _____.
 74) Other: _____.
 75) Other: _____.
 76) Other: _____.
 77) Other: _____.
 78) Other: _____.
 79) Other: _____.
 80) Other: _____.
 81) Other: _____.
 82) Other: _____.
 83) Other: _____.
 84) Other: _____.
 85) Other: _____.
 86) Other: _____.
 87) Other: _____.
 88) Other: _____.
 89) Other: _____.
 90) Other: _____.
 91) Other: _____.
 92) Other: _____.
 93) Other: _____.
 94) Other: _____.
 95) Other: _____.
 96) Other: _____.
 97) Other: _____.
 98) Other: _____.
 99) Other: _____.
 100) Other: _____.
 101) Other: _____.
 102) Other: _____.
 103) Other: _____.
 104) Other: _____.
 105) Other: _____.
 106) Other: _____.
 107) Other: _____.
 108) Other: _____.
 109) Other: _____.
 110) Other: _____.
 111) Other: _____.
 112) Other: _____.
 113) Other: _____.
 114) Other: _____.
 115) Other: _____.
 116) Other: _____.
 117) Other: _____.
 118) Other: _____.
 119) Other: _____.
 120) Other: _____.
 121) Other: _____.
 122) Other: _____.
 123) Other: _____.
 124) Other: _____.
 125) Other: _____.
 126) Other: _____.
 127) Other: _____.
 128) Other: _____.
 129) Other: _____.
 130) Other: _____.
 131) Other: _____.
 132) Other: _____.
 133) Other: _____.
 134) Other: _____.
 135) Other: _____.
 136) Other: _____.
 137) Other: _____.
 138) Other: _____.
 139) Other: _____.
 140) Other: _____.
 141) Other: _____.
 142) Other: _____.
 143) Other: _____.
 144) Other: _____.
 145) Other: _____.
 146) Other: _____.
 147) Other: _____.
 148) Other: _____.
 149) Other: _____.
 150) Other: _____.
 151) Other: _____.
 152) Other: _____.
 153) Other: _____.
 154) Other: _____.
 155) Other: _____.
 156) Other: _____.
 157) Other: _____.
 158) Other: _____.
 159) Other: _____.
 160) Other: _____.
 161) Other: _____.
 162) Other: _____.
 163) Other: _____.
 164) Other: _____.
 165) Other: _____.
 166) Other: _____.
 167) Other: _____.
 168) Other: _____.
 169) Other: _____.
 170) Other: _____.
 171) Other: _____.
 172) Other: _____.
 173) Other: _____.
 174) Other: _____.
 175) Other: _____.
 176) Other: _____.
 177) Other: _____.
 178) Other: _____.
 179) Other: _____.
 180) Other: _____.
 181) Other: _____.
 182) Other: _____.
 183) Other: _____.
 184) Other: _____.
 185) Other: _____.
 186) Other: _____.
 187) Other: _____.
 188) Other: _____.
 189) Other: _____.
 190) Other: _____.
 191) Other: _____.
 192) Other: _____.
 193) Other: _____.
 194) Other: _____.
 195) Other: _____.
 196) Other: _____.
 197) Other: _____.
 198) Other: _____.
 199) Other: _____.
 200) Other: _____.
 201) Other: _____.
 202) Other: _____.
 203) Other: _____.
 204) Other: _____.
 205) Other: _____.
 206) Other: _____.
 207) Other: _____.
 208) Other: _____.
 209) Other: _____.
 210) Other: _____.
 211) Other: _____.
 212) Other: _____.
 213) Other: _____.
 214) Other: _____.
 215) Other: _____.
 216) Other: _____.
 217) Other: _____.
 218) Other: _____.
 219) Other: _____.
 220) Other: _____.
 221) Other: _____.
 222) Other: _____.
 223) Other: _____.
 224) Other: _____.
 225) Other: _____.
 226) Other: _____.
 227) Other: _____.
 228) Other: _____.
 229) Other: _____.
 230) Other: _____.
 231) Other: _____.
 232) Other: _____.
 233) Other: _____.
 234) Other: _____.
 235) Other: _____.
 236) Other: _____.
 237) Other: _____.
 238) Other: _____.
 239) Other: _____.
 240) Other: _____.
 241) Other: _____.
 242) Other: _____.
 243) Other: _____.
 244) Other: _____.
 245) Other: _____.
 246) Other: _____.
 247) Other: _____.
 248) Other: _____.
 249) Other: _____.
 250) Other: _____.
 251) Other: _____.
 252) Other: _____.
 253) Other: _____.
 254) Other: _____.
 255) Other: _____.
 256) Other: _____.
 257) Other: _____.
 258) Other: _____.
 259) Other: _____.
 260) Other: _____.
 261) Other: _____.
 262) Other: _____.
 263) Other: _____.
 264) Other: _____.
 265) Other: _____.
 266) Other: _____.
 267) Other: _____.
 268) Other: _____.
 269) Other: _____.
 270) Other: _____.
 271) Other: _____.
 272) Other: _____.
 273) Other: _____.
 274) Other: _____.
 275) Other: _____.
 276) Other: _____.
 277) Other: _____.
 278) Other: _____.
 279) Other: _____.
 280) Other: _____.
 281) Other: _____.
 282) Other: _____.
 283) Other: _____.
 284) Other: _____.
 285) Other: _____.
 286) Other: _____.
 287) Other: _____.
 288) Other: _____.
 289) Other: _____.
 290) Other: _____.
 291) Other: _____.
 292) Other: _____.
 293) Other: _____.
 294) Other: _____.
 295) Other: _____.
 296) Other: _____.
 297) Other: _____.
 298) Other: _____.
 299) Other: _____.
 300) Other: _____.
 301) Other: _____.
 302) Other: _____.
 303) Other: _____.
 304) Other: _____.
 305) Other: _____.
 306) Other: _____.
 307) Other: _____.
 308) Other: _____.
 309) Other: _____.
 310) Other: _____.
 311) Other: _____.
 312) Other: _____.
 313) Other: _____.
 314) Other: _____.
 315) Other: _____.
 316) Other: _____.
 317) Other: _____.
 318) Other: _____.
 319) Other: _____.
 320) Other: _____.
 321) Other: _____.
 322) Other: _____.
 323) Other: _____.
 324) Other: _____.
 325) Other: _____.
 326) Other: _____.
 327) Other: _____.
 328) Other: _____.
 329) Other: _____.
 330) Other: _____.
 331) Other: _____.
 332) Other: _____.
 333) Other: _____.
 334) Other: _____.
 335) Other: _____.
 336) Other: _____.
 337) Other: _____.
 338) Other: _____.
 339) Other: _____.
 340) Other: _____.
 341) Other: _____.
 342) Other: _____.
 343) Other: _____.
 344) Other: _____.
 345) Other: _____.
 346) Other: _____.
 347) Other: _____.
 348) Other: _____.
 349) Other: _____.
 350) Other: _____.
 351) Other: _____.
 352) Other: _____.
 353) Other: _____.
 354) Other: _____.
 355) Other: _____.
 356) Other: _____.
 357) Other: _____.
 358) Other: _____.
 359) Other: _____.
 360) Other: _____.
 361) Other: _____.
 362) Other: _____.
 363) Other: _____.
 364) Other: _____.
 365) Other: _____.
 366) Other: _____.
 367) Other: _____.
 368) Other: _____.
 369) Other: _____.
 370) Other: _____.
 371) Other: _____.
 372) Other: _____.
 373) Other: _____.
 374) Other: _____.
 375) Other: _____.
 376) Other: _____.
 377) Other: _____.
 378) Other: _____.
 379) Other: _____.
 380) Other: _____.
 381) Other: _____.
 382) Other: _____.
 383) Other: _____.
 384) Other: _____.
 385) Other: _____.
 386) Other: _____.
 387) Other: _____.
 388) Other: _____.
 389) Other: _____.
 390) Other: _____.
 391) Other: _____.
 392) Other: _____.
 393) Other: _____.
 394) Other: _____.
 395) Other: _____.
 396) Other: _____.
 397) Other: _____.
 398) Other: _____.
 399) Other: _____.
 400) Other: _____.
 401) Other: _____.
 402) Other: _____.
 403) Other: _____.
 404) Other: _____.
 405) Other: _____.
 406) Other: _____.
 407) Other: _____.
 408) Other: _____.
 409) Other: _____.
 410) Other: _____.
 411) Other: _____.
 412) Other: _____.
 413) Other: _____.
 414) Other: _____.
 415) Other: _____.
 416) Other: _____.
 417) Other: _____.
 418) Other: _____.
 419) Other: _____.
 420) Other: _____.
 421) Other: _____.
 422) Other: _____.
 423) Other: _____.
 424) Other: _____.
 425) Other: _____.
 426) Other: _____.
 427) Other: _____.
 428) Other: _____.
 429) Other: _____.
 430) Other: _____.
 431) Other: _____.
 432) Other: _____.
 433) Other: _____.
 434) Other: _____.
 435) Other: _____.
 436) Other: _____.
 437) Other: _____.
 438) Other: _____.
 439) Other: _____.
 440) Other: _____.
 441) Other: _____.
 442) Other: _____.
 443) Other: _____.
 444) Other: _____.
 445) Other: _____.
 446) Other: _____.
 447) Other: _____.
 448) Other: _____.
 449) Other: _____.
 450) Other: _____.
 451) Other: _____.
 452) Other: _____.
 453) Other: _____.
 454) Other: _____.
 455) Other: _____.
 456) Other: _____.
 457) Other: _____.
 458) Other: _____.
 459) Other: _____.
 460) Other: _____.
 461) Other: _____.
 462) Other: _____.
 463) Other: _____.
 464) Other: _____.
 465) Other: _____.
 466) Other: _____.
 467) Other: _____.
 468) Other: _____.
 469) Other: _____.
 470) Other: _____.
 471) Other: _____.
 472) Other: _____.
 473) Other: _____.
 474) Other: _____.
 475) Other: _____.
 476) Other: _____.
 477) Other: _____.
 478) Other: _____.
 479) Other: _____.
 480) Other: _____.
 481) Other: _____.
 482) Other: _____.
 483) Other: _____.
 484) Other: _____.
 485) Other: _____.
 486) Other: _____.
 487) Other: _____.
 488) Other: _____.
 489) Other: _____.
 490) Other: _____.
 491) Other: _____.
 492) Other: _____.
 493) Other: _____.
 494) Other: _____.
 495) Other: _____.
 496) Other: _____.
 497) Other: _____.
 498) Other: _____.
 499) Other: _____.
 500) Other: _____.
 501) Other: _____.
 502) Other: _____.
 503) Other: _____.
 504) Other: _____.
 505) Other: _____.
 506) Other: _____.
 507) Other: _____.
 508) Other: _____.
 509) Other: _____.
 510) Other: _____.
 511) Other: _____.
 512) Other: _____.
 513) Other: _____.
 514) Other: _____.
 515) Other: _____.
 516) Other: _____.
 517) Other: _____.
 518) Other: _____.
 519) Other: _____.
 520) Other: _____.
 521) Other: _____.
 522) Other: _____.
 523) Other: _____.
 524) Other: _____.
 525) Other: _____.
 526) Other: _____.
 527) Other: _____.
 528) Other: _____.
 529) Other: _____.
 530) Other: _____.
 531) Other: _____.
 532) Other: _____.
 533) Other: _____.
 534) Other

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhao et al, US Patent 5,558,717.

Zhao et al teaches a CVD apparatus that includes: a processing chamber 134 with an inner space 141; a gas feed member 126 for supplying a gas into the chamber; an aluminum diffuser 122 partitioning the inner space of the chamber into a first and second partitions having a plurality of holes 121 and includes an "L" shaped extension overlapping a surface of the insulating frame (area surrounding O-ring 125); a ceramic insulating frame 120 disposed in between the chamber and the diffuser; a baffle plate (blocking plate) 124 for mixing and spreading the gas feed member before passing through the holes of the diffuser; and an RF source connected to the diffuser and the pedestal is grounded. (Entire document, specifically Figure 1) The specific substrate processed is an intended use of the apparatus and the apparatus of Zhao et al can inherently process any desired substrate.

3. Claims 1, 2, and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Koai et al, US Patent 6,106,625.

Koai et al teaches a CVD apparatus that includes: a processing chamber 150 with an inner space 26; a gas feed member 160 for supplying a gas into the chamber; a diffuser 156 partitioning the inner space of the chamber into a first and second partitions having a plurality of holes 180 and includes an "L" shaped extension 158 overlapping a surface of the insulating frame; a ceramic insulating frame 174 disposed in between the chamber and the diffuser; a baffle plate (blocking plate) 30 for mixing and spreading the gas feed member before passing through the holes of the diffuser; and an RF source connected to the diffuser and the pedestal is grounded. (Entire document, specifically Figure 8) The specific substrate processed is an intended use of the apparatus and the apparatus of Koai et al can inherently process any desired substrate.

Conclusion

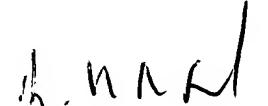
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art teaches the technological background of the invention. The cited art contains patents that could be used to reject the claims under 35 USC § 102 or 103. These rejections have not been made because they do not provide any additional or different teachings, and if they were applied, would have resulted in an undue multiplication or references. (See MPEP 707.07(g))

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrie R. Lund whose telephone number is (571) 272-1437. The examiner can normally be reached on Monday-Thursday (6:30 am-6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrie R. Lund
Primary Examiner
Art Unit 1763

JRL
3/21/05